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EFFORTS TO REDUCE MERCURY

The McGuinty government is committed to protecting families and children through tough new environmental laws, including a toxics reduction strategy to reduce pollution and protect Ontarians from toxic chemicals. The first step towards fulfilling this commitment was the introduction of new legislation to ban the use and sale of pesticides that may be used for cosmetic purposes.

It is also working alone and with others to reduce mercury in the environment.

Meeting Canada-wide standards

The Canada-wide standard for reducing mercury emissions from coal-fired power plants is 60 per cent nationally by 2010. Ontario will need to emit 360 kilograms (kg) per year or less of mercury from its coal fleet to meet the target. Ontario's mercury emissions from its coal fleet in 2005 were 320 kg, already lower than the 360 kg/year level. It will more than surpass its goal when coal-fired power facilities are closed. Closing the Lakeview coal-fired electricity generating station in April 2005 was an important first step in reducing mercury emissions and set the groundwork for Ontario's implementation of the Canada-wide standard for mercury emissions from this sector.

Ontario has also championed the development of mercury standards at the Canadian Council of Ministers of the Environment level for a variety of sectors including:

- Emissions from base metal smelters and incinerators (hazardous waste, sewage sludge, municipal waste and biomedical waste) – The ministry has amended the Certificates of Approval for all operating incinerators (hazardous waste, sewage sludge, medical waste, municipal solid waste incinerators), and base metal smelters in Ontario to include the Canadian wide standards for mercury limits.
- Waste dental amalgam - Working with the Canadian Dental Association, the provinces and the federal government came up with a Canada-wide standards to capture 95 per cent of dental amalgam by 2005. To achieve this goal, Ontario passed Regulation 196/03 and amended O. Reg. 205/94 to require dental offices to install a dental amalgam separator to capture the mercury contained in amalgam (tooth filling) that is removed. Ontario has already surpassed its goal and has achieved 98 per cent reduction in mercury.
- Fluorescent lamps – The Ontario government is funding the Recycling Council of Ontario's Take Back the Light program, Canada's first and only fluorescent lamp recycling program for the industrial, commercial and institutional sector. The goal is to recover and recycle the 30 million lamps disposed of yearly from thousands of IC&I sector buildings across the province.

Funding Clean Air Foundation's mercury programs

Ontario has supported two Clean Air Foundation (CAF) programs since 2001 to remove mercury switches from vehicles before they reach the wrecking yard.

- *Switch Out*: Automotive mercury switches are small devices that activate the convenience lights in the hoods and trunks of automobiles and some anti-lock braking systems. They have not been used since 2003 but there are still millions of vehicles on the road with mercury-containing switches in them. As of February 2007, over 67,443 mercury switches have been collected in Ontario through CAF's *Switch Out* program. This has meant a diversion of over 57 kilograms of mercury from electric arc furnaces.
- *Switch the 'Stat*: Most old thermostats – the ones that the majority of Ontarians have in their homes – have one or two mercury switches and contain approximately 2.5 grams of mercury. The CAF program connects people in Ontario with a local contractor who will replace their old thermostat with a newer more energy-efficient programmable model and safely dispose of the old one. There are more than 750 contractors across Ontario participating in *Switch the 'Stat*. To date, the program has effectively diverted mercury switches from landfills by collecting 4,000 mercury-containing thermostats. This translates into the safe recovery and storage of over 10 kilograms of mercury.

Recognizing the CAF's accomplishments, the federal government announced in December 2006 that it would require vehicle manufacturers and steel mills to prepare and implement pollution prevention plans over the next four years to ensure mercury switches are removed from automobiles before the vehicles are recycled. This action is expected to prevent the release of as much as ten tonnes of mercury into the environment over the next 10 years across Canada.

Industry's efforts to meet Canada-wide standards for lamps

In response to a Canada wide standards for fluorescent lamps, in June 2000, Electro-Federation Canada, which represents lamp manufacturers including GE Lighting, OSRAM Sylvania Ltd., Panasonic Canada Inc. and Philips Lighting, made a commitment to dramatically reduce the amount of mercury in fluorescent lamps. Their members produce over 90 per cent of the fluorescent and high intensity discharge lamps sold in Canada. When the commitment was made in 2000, the 1990 baseline was 43 milligrams of mercury per lamp. The lamp manufacturers committed to an 80 per cent reduction by 2010, which they surpassed in 2006, at which time the average content was 7.9 mg per lamp.